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Correspondence from practical farmers, giving the
results of their experience, is solicited. Letters
should be signed with the writer's real name, in full,
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wish.

The PLOUGHMAN offers great advantages to ad-
vertisers. Its circulation is large and among a most
active and intelligent portion of the community.
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A Crop of Mushrooms.

In growing mushrooms at the Cornell
Experiment Station the space under the
bench in a small basement room was made
into a bed by placing a plank in front
against the legs in order to support the ma-
terial. The material then was placed di-
rectly on the basement floor and against the
stone wall behind. Boxes were used under
the benches in the greenhouse. These were
most convenient to handle under the low
bench of the greenhouse, because the space
was quite wide. These boxes were 34 1/2 feet
wide and one foot deep. There were five of
these. The space in these boxes, together
with that under the bench in the basement,
made a total of about ninety square feet.
Up to the present time, 181 pounds of mush-
rooms have been picked from this area from
one planting of spawn, practically two
pounds per square foot.

The manure was obtained and composted
Oct. 31. By Nov. 9 it was cured and ready
for putting on the beds. The temperature
of the material in the beds was suitable for
spawning on Nov. 23 when the spawn was
planted. The beds were made in the base-
ment on Dec. 1, in the greenhouse Dec. 2.
The first mushroom was picked about Jan. 1,
that is, five weeks from spawning the beds.
In six weeks we began picking regularly,
at first a few, the number gradually increas-
ing and then diminishing again as the beds
became exhausted. A space representing
about seventy to seventy-five square feet
ceased bearing about March 20; the remain-
ing space was bearing its heaviest about
April 1 to 10. For some reason the spawn
in this part of the bed was very late in
starting. It was fully two months after
spawning before any evidence of mush-
room growth appeared. The mushrooms
usually were picked every other day and
when the crop was at its best bearing from
four to eight pounds were collected at each
picking.

PLACES SUITABLE FOR MUSHROOMS.
Cellars or basement rooms where the tem-
perature in the winter does not go below
50° or does not rise above 65°, are suitable
places for growing mushrooms. It is not
advisable to make them under the living part
of the house, since the odor of the manure
will fill the house. They can also be grown
in stables which are not too cold in winter.
If grown under benches in greenhouses,
the beds must not be too near heating pipes,
and an oil cloth screen must be sloped
under the bench to turn off the drip from
the water used on the benches above. Beds
can be prepared in the cellar or base-
ment floor by using the wall for one side of
the bed. A board or plank from one foot to
fifteen inches in width can then be stood on
edge three to four feet from the basement
wall and held in position by the necessary
upright scantlings and supported at inter-
vals to hold the material in position. In this
way a box of the desired width and
length can be made, the floor of the base-
ment or cellar serving as the bottom. If
more space is desired, tiers of beds can be
made; that is, two or three or four beds,
one above the other, against the cellar wall.
This is a common practice. Cross pieces
from the uprights can be nailed on, upon
which the floor of the upper beds can be
laid. These should be made of lumber at
least one inch in thickness. A space about
twenty to twenty-four inches should be left
between the top of one bed and the bottom
of the one directly above it. All these
places should have some ventilation, but
there should not be air currents, and care
should be taken to make the rooms in which
the mushrooms are planted clean and sweet
in order to avoid as far as possible any
conditions which would encourage insects and
other enemies of the mushrooms.

THE SPAWN.

Spawn can be obtained from any of the
large seedsmen. The spawn handled by
these firms is imported. One firm has on
the market three varieties of spawn, known
as the Alaska, Columbia and Bohemia, the
first kind a whitish one, and the two latter
with a brownish cap, the Bohemia being a
stouter mushroom than the other two. It
is possible with the method employed by
this company to cultivate varieties true to
name because the spawn is derived from
known varieties, whereas most or all of the
imported spawn may contain several vari-
eties mixed.

Connecticut Farm Notes.

We have been having exceptionally fine
weather in October, which has given the
farmers an opportunity to push their fall
work. Apple picking is about over, and the
general report is a small crop of not very
extra quality, but a few orchards have pro-
duced a good yield of excellent fruit. Buy-
ers have not yet put in an appearance, but

It is generally conceded that prices will rule
much higher than for several seasons past.
At present, fall apples are selling in the
local markets at from sixty to eighty cents
per bushel.

Potatoes in many fields have decayed
badly, and in some cases the crop is almost
a failure. The prospect is that prices will
be higher than last year; at present they are
selling at from seventy to seventy-five cents
per bushel. The crop will nearly all be
harvested this month. The weather has
been favorable for the corn crop, which is
maturing well in the shocks. But few fields
were injured by frosts, and silos generally

In Vermont's Apple Country.

While all northern Vermont is in the
main a good dairy country, the extreme
northern corners are quite in contrast to the
local products. Essex County at the
northeast being the most prominently
wooded country, and Grand Isle County at
the northwest being the most fully devoted
to apple culture.

AT ORCHARD ON EVERY FARM.

This county is quite unique in several
respects, being entirely enclosed by the
waters of Lake Champlain, excepting the
Canadian land border on the north. But in

of his storehouse showed the most uni-
form dark green foliage of any orchard,
large or small, that I ever saw, and the
ground beneath of his Greening and Spy fruit
were fine. Mr. Kinney estimated his crop of
these two kinds at about fifteen hundred
barrels, or three-fourths crop, which is
above the average of the islands. He can
store his entire crop in his own storehouse
basement, as he will for awhile, although
buyers are offering good prices. Such is the
good reputation of the island and Cham-
plain Valley fruit that buyers seem tumb-
ling over each other to get hold of it this
year. Prices have been ranging from \$2.50

apples is usually low.—H. J. Harriman,
Hancock County, Me.

Now that it has been demonstrated that a
gallon of gasoline, costing twenty cents,
will propel an 18-horse-power automobile
fifteen miles in thirty minutes over a good
road, and that this machine has already
been ordered to farm use—to plow three fur-
rows at a time and otherwise prepare
ground for crops, and harvest them when
ripe, there seems little need of our sinking
into agricultural despair, or of turning our-
selves into chickens and going to roost. It
becomes us rather to tighten our belts,
knit our teeth and "brace up" to the level

could be "finished off" in this fireless stove
after having reached the boiling point.

This "stove" is ridiculously simple; it
consists merely of a light wooden box,
loosely filled with shavings, paper or hay,
the last mentioned being the most satisfac-
tory. In this packing nests are prepared,
in which are placed the pots after the con-
tents have reached the boiling point.
Earthen receptacles are best, as they hold
the heat longest. The packing should then
be pressed around and over the pots, the
whole being covered with a hay pillow and
the tight-fitting lid closed over all. Such a
device as this can readily be made in any
home and should prove of lasting use-
fulness to the housewife. The box, of
course, cannot be used for steaks or other
foods whose attraction lies in the crispness
resulting from rapid cooking over a hot
fire. In general it has been found that two
or three minutes of actual boiling on the
fire is amply sufficient for vegetables, while
roasted meat requires but twenty to thirty
minutes, the remainder of the work being
done by the fireless stove. Most articles
should remain tightly closed in the box for
two or three hours, though they can be left
there and kept there all day or night. The
cooking box is said to be a great scheme for
keeping babies' milk warm.

GOOD USE FOR GOVERNMENT SEEDS.

The pupils of the public schools at Wash-
ington were supplied last spring with a
variety of flower and garden seeds by the
office of the Department of Agriculture,
and during the past week they have had an
exhibition of flowers raised by them during
the summer vacation. The idea of school
gardens has been encouraged in Germany,
Norway and Sweden for many years, and
the success attained in those countries has
encouraged officials in this country to en-
deavor to establish the system here also.
One reason, it is urged, for the establish-
ment of the gardens is to bring about civic
improvement and a betterment of the ap-
pearance of the school grounds and the
homes of the students. The child is taught
to look upon a plant as a necessity for the
life and happiness of every one, as an orna-
ment, and as a living, constantly growing
thing. Nature study in the public schools
is now taught from the supply of plant
material furnished by the school gardens.

WASHINGTON'S EARLY WEALTH.

Recent examination of the records of
Fairfax County, Va., shows that George
Washington owned fifty thousand acres of
land when twenty-seven years old, and at
the fall slaughter in 1780, the Washing-
ton family killed 120 hogs for their use.

The examination also brought out the
facts that in 1787 the Father of His Country
owned 500 acres in grass, four hundred acres
in oats, seven hundred acres in wheat and
seven hundred acres in other grains. He
owned 140 horses, 112 cows, five hundred
sheep and had 200 negroes on the planta-
tion.

The Experiment Station Record published
by the Department of Agriculture, for Sep-
tember, calls attention to the fact that
public interest has become quite generally
aroused in the reclamation of land for agri-
cultural purposes. The most familiar form
to the people is reclamation by irrigation.
This form has been increased rapidly
through the influence of Federal aid. An-
other form and closely allied to irrigation
is dry land or arid farming, carried on
with crops which, under improved cultural
methods, can be grown with a minimum of
artificially supplied water, or with natural
rainfall of the locality. Reclamation by
drainage is another method. Land subject
to redemption by this method is not merely
confined to the West alone, but may be
found at the coast, along river courses, in
the level countries of the Middle West, and
in the arid and semi-arid regions of the
West. The amount of land which can be
reclaimed by drainage is estimated to be
about one hundred million acres. The pub-
lication states that while there are sections
of the West, particularly Utah, where irri-
gation has been practiced so extensively,
that the land has been subjected to too
much water so that many thousands of
acres have become bogs and marshes. But
in the East reclamation by drainage finds
its greatest possibilities. The overglades of
southern Florida are attracting attention,
for it is believed this section, through
proper drainage, might be more capable
of producing subtropical fruits and vegetable
for Northern markets. There are over
three hundred thousand acres of marsh
land in Wisconsin which at present have
little or no value. Along the Illinois river,
too, may be probably more than one hun-
dred thousand acres which might be re-
claimed by drainage. With our large in-
crease of population, the pamphlet contin-
ues, any movement which might be made
toward increasing the amount of land cap-
able of cultivation, means added increase of
crops with which to feed the hungry mil-
lions.

According to reports received by the De-
partment of Commerce and Labor from
Comandante Parsons, there is little or
no American fruit used in Mexico outside
of the City of Mexico.

During September the Postoffice Depart-
ment received \$6,515,500 as its share of the
public business, against \$5,907,203 for the
corresponding month of 1904, or an increase
of 10.35 per cent. Owing to the fact that
Portland is holding an exposition there,
that city shows the heaviest percentage of
increase. The same reason can be given to
the heavy decrease shown in the postal re-
ceipts of St. Louis, as compared with the
receipts of a year ago. The receipts of the
five largest cities were as follows: New
York, \$1,501,718; Chicago, \$1,095,287; Phila-
delphia, \$648,305; Boston, \$415,831; St.
Louis, \$288,704. GUY E. MITCHELL.



MUSHROOMS UNDER GREENHOUSE BENCHES.

The Columbia variety. Spores at Cornell experiment station.

have been filled with corn of good growth
and quality. A few fields of castile corn
were injured by frosts.

The milk question between producers and
contractors is settled for the next six
months, and it looks as though the contrac-
tors were given the inside track as usual.
The only new feature of the deal just made
is the agreement by the contractors to fur-
nish producers with clean cans. While this
will be a great benefit to both producer and
contractor, the producer has to pay for it.
This feature of the contract should lead to
the furnishing of better cans to producers
as the contractors cannot help know-
ing the condition of the cans sent out;
and with better cans, thoroughly cleaned,
producers will be able to furnish better

its thirty miles of length by three to eight
miles in width, of its different islands it has
not a stream of water of permanent flow to
support a trout. So that the modern har-
vesters are the most prominent machinery
in the whole island country, and an apple
barrel shop comprises the heaviest steam
power works.

There is probably not another county in
New England where every farm has its
apple orchard as here in Grand Isle, and no
one or two men have a great monopoly of
the product, as is sometimes the case in to-
beco and hop sections.

THE SOIL.

seems to be of a dark slate and gravel loam
and produces good crops of all sorts com-
mon to the latitude. Some orchardists do a

to \$4.50 per barrel. As Mr. Kinney does
not keep a dairy it may be of some prac-
tical interest to know how he treats his trees
and soil without barnyard fertilizer. He
has adopted spraying and is confident as to
its beneficial effects on fruit and foliage.
He cultivates his entire orchard yearly with
plow and harrow in the spring and uses
commercial fertilizers. He then sows some
nitrogen-drawing seed for a crop that he
turns under after the apples are gathered;
this season it was beans he so used.

LAND VALUES RISING.

The people here generally own the home-
stead they are on and there are no aban-
doned farms on these islands. In fact,
since the advent of the railroad through the

of our opportunities.—J. B. Walker, Mar-
rimes County, N. H.

In the British Isles the present interest is
at fever heat in the matter of disease re-
sistance, as shown by some of our recently
originated varieties. The most successful
varieties today have been sent out by the
Scotch breeder, Findlay, and the English
firm, Sutton & Sons. Last year two pounds
of Findlay's Eldorado sold at public auction
at \$1000, and even higher proportional
prices are paid for smaller amounts. These
were, of course, speculative prices, but as
Mr. Findlay is now asking and getting
three guineas (nearly \$16) per pound, there
is fair margin for possible profit to the re-
producers of the preceding year.—L. R.
Jones, Chittenden County, Vt.



MUSHROOMS GROWING IN BASEMENT.

A crop of the Bohemia variety at Cornell experiment station. The three large specimens in the center weighed one pound three ounces.

quality milk. Under the old system pro-
ducers have been obliged to use cans so
rusty that they were not fit to contain milk
for human beings. The best milk that can
be produced if put into such cans is unfit
for use by the time it reaches Boston. A
reform in this respect is greatly needed,
and I sincerely hope the new deal will
bring it about.

Eggs have been very high for several
weeks, retailing at thirty-five cents per
dozen, and strictly fresh eggs are in good
demand.

The supply of farm laborers is hardly
equal to the demand, and good workers are
kept busy.
Columbia, Ct.

good dairy business while others claimed it.
The tempting influence of the lake waters
is worth many thousand dollars yearly in
warding off the early frosts from this
county as well as all the mainland borders
in two States. Here on the islands the corn
fields looked about as green the first week
in October as in August, while on main-
land, a few miles from the shore, the corn
was badly frosted early in September.

E. L. KINNEY'S PAYING ORCHARD.
Among the prominent apple producers is
T. L. Kinney of South Hero, whose orchard
views as well illustrated an article in this
journal last summer, and the chance to take
as fine view this season was there. The
view over his main orchard from the capital

water from Burlington, real estate has ad-
vanced twenty-five per cent, and a farm
sells as high as in any strictly farming sec-
tion in New England, a condition partly due
to the influx of the summer residents.
Vermont.
H. M. POSTER.

Brief Farm Comments.

I believe the man who takes the right
view of the life of the farm is the man to
engage in agriculture.—C. A. Stetson, Lin-
coln County, Me.

I can get four times as much out of dairy-
ing or stock raising as I can get out of fruit.
There is no market for garden truck or
apples in this locality and the price of

Notes from Washington, D. C.

THE FIRELESS COOKING STOVE.

Last April a report received by the De-
partment of Commerce and Labor from
Germany described some remarkable re-
sults which had been obtained in that coun-
try with a device called a "fireless stove,"
or in reality a contrivance to complete the
cooking of foods. Experiments have main-
tained for some time that in ordinary cook-
ing there is a great waste of heat, care and
attention, as well as unnecessary wear and
tear on utensils. While the first experi-
ments made abroad were intended merely to
keep cooked foods warm, it was found that
all boiled and steamed meats, soups, fish,
crops, vegetables, fruit, puddings, etc.,

Dairy.

A Famous Dairy Section.

Franklin County, Vt., has long been known as the great dairy country of the State, and its mammoth creamery butter factory at St. Albans is well known among all the dairy produce dealers of the Eastern States.

The original company was formed by the local farmers, to be conducted practically on the corporation plan. Later New York and Boston dealers bought a large proportion of the stock, and spent considerable money on the plant, which now they have turned over mainly to St. Albans and vicinity residents. As the individual farmers now prefer to buy and use their own separators, the skimming stations that were established over the county are in some cases being discarded, and several new smaller creameries have recently been built in the county. There is really quite a bit of dissatisfaction with the old plant.

The most noticeable of the new butter factory plants is that of the Owl's Head Creamery Company at Enosburg Falls, in the same county, in the very best section of the county for pasturage and pure water. The company is a private corporation formed by several prominent business men of the town and seems to give the farmers good satisfaction. The treasurer and manager, F. W. Draper, has been one of their own number.

The proprietors say they believe this to be the finest creamery in the State because of the thoroughness of construction and its equipment with the most modern machinery; the most sanitary because of its cement floors and wainscoting, the cement driveway and the discharge of all sewage into the race way of the water wheel, which supplies the creamery with power. The water is supplied from a mountain spring. The present make is about one thousand pounds per day, and the capacity is four tons per day. They are equipped to pasteurize and expect to do this during the winter months. Instead of the regular cream vats they are equipped with the Wizard, which are considered to be the latest and best device in the handling of cream. The equipment was furnished by Stoddard Manufacturing Company, while the plans and arrangement are the conception of the manager.

There seems to be a generally prosperous condition throughout this section of the State, and the many new silos and barns confirm the idea. The last new barn to be inspected was that of John Wanser, the bachelor farmer of Fairfax, whose lack of helping to fill the schoolrooms seems to be quite a common thing among well-to-do farmers of the State. Mr. Wanser's barn, 50x110 feet on the ground, has its stable basement completely floored with cement, with gutters and basins to carry all fertilizer, and the equipment includes the modern conveniences for handling a large dairy outfit.

The Towis neighborhood in Franklin township is one of the finest farmer resident sections of the country, and the readers of this journal's local correspondent may be assured that the farm hints he gives are not mere theories. H. M. PORTER.

Sterling and Keeping Silage.

When corn should be put in. Corn is in best condition for silage when the majority of the ears are denting, but a great variety of circumstances commonly prevent the silage at just the proper time. Frost may come before corn is ready, machinery may break down, a rainy spell may make fields too soft to get into, etc. In such cases individual judgment must guide. Frosted corn may be used in silo if cut immediately after frost. When machinery is not ready for silage, frosted corn may be cut and piled up on the ground, putting four to six pounds in a pile. It may remain in such piles a week or ten days without harm. It is almost uniformly true that when the silage freezes in the silo the cows are fed frozen silage.

It is a stereotyped opinion that by mixing the frozen lumps with the warm silage in the silo cart an hour or two before feeding, the frozen lumps will be thawed out. This is a dream. One that doesn't come true. In the average silo which freezes seriously it will be found in severe weather that the top of the silage is covered with white frost. If one and a half or two inches of this top is taken off and put in the silage cart, as is the practice, will be found that the temperature is close to, if not below 32°. Put a few frozen lumps of silage a foot or so in diameter in this mass and at the end, not of two hours, but of twenty-four hours, they will still be frozen lumps. In nine cases out of ten in silos that freeze badly the silage is fed at a temperature of 32° to 35°. All careful stockmen warm the drinking water for their cows; but it is a much more serious matter to feed a cow forty pounds of silage at 32° than to give her twenty to thirty pounds of ice water.

Shut the door and stop freezing. In nearly all silos the doors at the top that are taken out when the feeding begins are never put back until again the silo is again filled. The top doors are all open in zero weather. All the warm air is escaping. The silo is afforded every opportunity to cool off. This method of handling the building invites freezing.

Two Successful Dairy Meetings.

Two successful dairy institutes have recently been held by the Granite State Dairyman's Association. One was in conjunction with the Sanborn (N. H.) Town Fair, and the other with Peterboro (N. H.) Grange.

The Sanborn Town Fair is one of the fine examples of what a wholesome agricultural fair might be. It has been running a number of years, and been very successful. The fair association owns one of the abandoned farms on the top of one of the highest hills in the town, where for miles around in all directions one overlooks the broad valleys and lesser hills until the outlines of bold and rugged mountains meet the horizon. This year the fair came on a most glorious fall day. The brilliant hues of the autumn foliage were at their best in the mellow sunshine. A large crowd gathered, and a good old home day and fair ensued. After dinner President Lann of the fair introduced the president of the Dairyman's Association, who spoke on the selection of the cow for the farm dairy. Speaking from a platform out of doors with a cow representing the dairy and one of the best type before him, the speaker was able to illustrate the points so that they were much appreciated by the nearly two thousand persons present. He especially dwelt on the open, relaxed, nervy conformation, the perfect udder formation, the capacity and constitution of the dairy animal as compared with the close, blocky, easy-going makeup of the beef animal.

Prof. Ivan C. Weld of the Agricultural College at Durham took up in a very pleasant

ing manner the discussion of the production of milk from a sanitary standpoint. After speaking of the importance of dairying and its relationship to the general prosperity of the agriculture of the State he emphasized the value of knowing the productive capacity of each cow and illustrated the easy manner in which this could be determined by use of the scales and the Babcock tester. He showed the manipulation of the tester with a machine upon the platform. He also told how to secure milk with the least number of bacteria in it showing the sanitary milk pails and the importance of keeping dirt out of the milk while milking. George H. Wadleigh spoke briefly of the good work the association was trying to do and its importance to the welfare of the State.

At Peterboro the Grange held a grange day and corn contest. Here in this picturesque town the institute was held in the beautiful town park. In the Town Hall were the exhibits of fancy work and farm products. A corn supper was served and an evening entertainment followed.

At the institute, Professor Shaw of the agricultural college at Durham, discussed the selection of the dairy cow in the manner the president of the association did at Sanborn. He had two cows before him, thus comparing the types and showing how to make selections.

The dairy association is now twenty-one years old and is in a very flourishing condition. During the year it has endeavored to get close to the dairy farmers of the State or those that it was designed to help. It is co-operating with the State Agricultural College in issuing a bulletin on the dairy industry of the State besides holding these two institutes. These meetings were highly appreciated by all who attended. They reflected much credit to the association. It is the practical illustrations that an outdoor meeting like these can give that appeals to the farmers. The addresses were specially and favorably commented upon. C.

Literature.

THE ART OF THE NATIONAL GALLERY.

In continuation of the valuable series entitled The Art Galleries of Europe, we have "The Art of the National Gallery," by Julia de Wolf Addison. This is a critical survey of the schools and painters represented in the National Gallery in London. The collection contained there was the only great one with which the author was familiar in her childhood, and therefore, she has found great enjoyment in the writing of this volume, which gives such a clear and concise account of some of the masterpieces of art. A brief history of the collection is given in the opening chapter, where we are told that the true way to visit the National Gallery is to take it by schools, beginning with the Italian, as one normally would, in following the course of art progress through the civilized world. This is the method followed by the author in her admirable and comprehensive record, which is enriched by biographical allusions, personal descriptions and pertinent anecdotes concerning many of the painters, and more especially those connected with the British school and the late British paintings. The student and general reader will find in these pages ample accurate information and in intelligent explanatory critical comment that will furnish an admirable equipment for gaining a thorough knowledge of the examples illustrated. The review of early art in Italy will be found particularly edifying, since the author consulted original authorities and the contemporary treatises, rather than later commentators, when dealing with technical processes, such as tempera, fresco, encaustic and oil painting. As a guide to the visiting student through the collection nothing could be more informative and suggestive than this volume, and to those who can only see the collection in the mind's eye, it will furnish a treasure house of knowledge that will increase greatly their aesthetic culture. From it may be gathered a brief view of the art of painting as it has progressed from the earliest times down to our own day. The numerous full-page reproductions of celebrated pictures in the book have been selected with manifest care and judicious taste, and the plan of the National Gallery which accompanies it, gives an excellent idea of the location of the various schools in the building. The publication is handsomely bound with a highly appropriate cover design, and it is enclosed in a neat box, which will facilitate its transportation as a beautiful and gift. (Boston: L. C. Page & Co. Price, \$3 net.)

BOYS WHO BECAME FAMOUS MEN. Stories of the childhood of poets, artists and musicians are told by Harriet Pearl Skinner in "Boys Who Became Famous Men." The subjects in this volume have been well chosen, and they treat of happenings in the juvenile lives of Glotz, Bach, Byron, Gainsborough, Handel, Coleridge, Canova and Chopin. The style of the book is attractive and the incidents introduced are all pleasing, great care being taken to exclude any allusions to disagreeable features in the mature experiences of the subjects. George Byron's life at Aberdeen before he became a lord and his boy love for Mary Duff are described in these pages truthfully, barring a few felicitous imaginative strokes, and Coleridge's career at Christ's Hospital, London, where he was a schoolmate of Charles Lamb, is dwelt upon in an interesting manner that brings out the character of both lads with more than ordinary impressiveness. The book is one that studious children will appreciate heartily, and it will, no doubt, encourage them to take advantage of that opportunity which is young ambition's ladder. The stories are more entertaining than many that are entirely fanciful. The volume is handsomely illustrated by Sears, Gallagher. (Boston: Little, Brown & Co. Price, \$1.50.)

Those who have read "Calibre" will turn expectantly to "Starmose: Man and Man," from the same skillful pen. The present book has much to do with the labor question and socialism, and on both subjects the author is unusually well informed. The inequalities in social conditions under which human-kind labor are discussed and pictured herein, through a group of typical characters, and the conclusions will awaken thought if they do not secure conviction. The ideal man of affairs as he is suggested in this novel may never arrive, but if he does this world will be a much better one to live in than it is now, for Calibre, who reappears in this book, says that "in the struggle for existence we've already got to the point when the powerful, cunning, selfish brute is less apt to survive than the honest, sympathetic and courteous man." As for the story proper, it is unique in its way, and concerns the love of a young doctor of mixed German and American parentage, for a German princess, who has an American mother. The way in which the reader knows that separates them is unaltered, shown legently and imaginatively

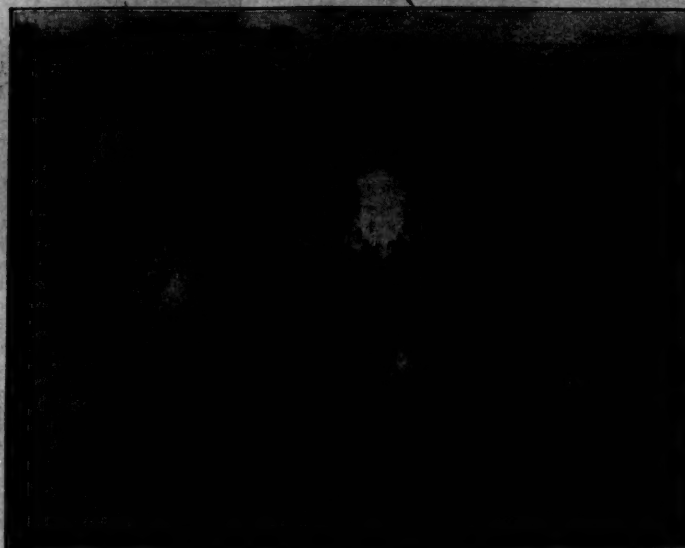
and that the author has not forgotten romance in his devotion to dialectic. There are many dramatic and exciting scenes in the development of the plot, beginning with the opening chapter, in which a dependent workman tries to throw himself overboard and is saved by the hero. The people who figure in the incidents are drawn to the life, and converse as those in their positions would do in all likelihood. The book is one that will command the attention of both novel readers and reformers. (New York: The Macmillan Company. Price, \$1.50.)

THE DEEP SEA'S TOLL. A collection of tales by James B. Connolly has the significant title, "The Deep Sea's Toll." They all relate to the perils of life of the seaman and fisherman. They are marked by their writer's intimate knowledge of life aboard ship and the peculiarities and characteristics of the hardy mariners of Gloucester and elsewhere, who face death so nobly in the pursuit of a living for those they hold dear. No writer has got nearer the heart of things in the portrayal of the real nature of the seafarer

and his life so necessary to secure the continued success of one of the most beneficent projects for the alleviation of human affliction that has ever been presented.

The Gloucester district is looked upon as an ideal place for the erection of such a modern structure that would be suited to the needs of the school in all its varied activities; and if some generous person would give land as a site for the building the first step in improvement would be made. There are, no doubt, many real estate holders who could meet this requirement without being hampered by the disposal of a worthy gift that would enroll them among the list of those who have earnestly helped those who are suffering not through their own fault, but through the mysterious designs of fate.

At present, it costs, according to the estimation of Miss Snow, about \$5000 to maintain the nursery yearly, not a large sum, but one which it is nevertheless difficult to procure. The assistance obtained for the permanent fund is far from being sufficient

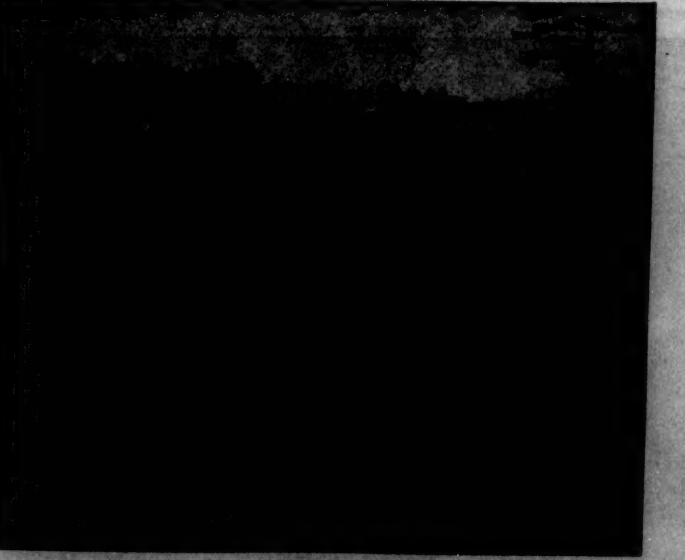


SHORT-HORN COW BOWENA 2D.

This six-year-old cow, in the World's Fair Dairy Demonstration at St. Louis, 1904, in 120 days gave 425 pounds of milk, containing 172.4 pounds of butter-fat, and 282 pounds of solids not fat, besides gaining 150 pounds in weight. Her weight at the close of the demonstration was 1513 pounds. Photographed for Secretary F. D. Coburn of Kansas Board of Agriculture.

than Mr. Connolly, and his work will live on account of its intense realism—a realism, be it said, that is not without picturesque features. His literary method is bright and breezy and smacks of the salt water at every turn, and his dialogue is drawn from the well of truth. One of the stories, The Wicked Celestine, relates to one of the fishing schooners sailing out of Boston that are not surpassed, it is said, by any class of vessels that sail the sea. The remaining contents of the volume include The Ball Carriers, The Truth of the Oliver Cromwell, Strategy and Seamanship, Dory-Mates, The Sailing of the Bark Fuller, On Georges Shoals and Patsie Oddie's Black Night. All these tales are, no doubt, more or less familiar to readers of current periodical literature, but they will be glad to possess them in their present permanent form, while lovers of fiction, who have not yet read them will find a world of spirited entertainment in many stirring adventures that are recounted with a spontaneous literary art that is irresistible. The volume has several characteristic full-page illustrations by W. F. Aylward and H. Rauterdahl. (New York: Charles Scribner's Sons. Price, \$1.50.)

RELIGION AND POLYNESIA. Under the above title we have thirteen discourses by Algernon Sidney Crapey, which are called sermon lectures, because they were intended to arouse spiritual emotions while they also imparted historical information. The author's lecture on The Present State of the Churches has caused a great deal of discussion and contention, and he claims as a historical critic the right to investigate the facts of his own religion by the same method which he has been taught to use in the investigation of all other religions. He closes with a chapter on the "American Church State," in which he makes a plea for securing purer political parties. (New York: Thomas Whitaker. Price, \$1.25 net.)



ONE OF THE SMALL PIGS FOR POLLSTERS.

The Golden Chronicle.

An institute that is not so well known as its merits and importance demand is the Boston Nursery for Blind Babies at 60 Fort Avenue, Roxbury. There are hundreds of sightless infants in this Commonwealth who cannot be properly cared for by their parents, and, therefore, the perpetuation of this philanthropy and the enlargement of its resources are urgently desired.

It owes its creation to the wisdom and far-sightedness of Miss Bertha M. Snow, its present energetic and efficient superintendent. It was founded on Jan. 1, 1900, and she was well equipped by intelligence and experience for the inception and carrying out of the work, far previous to her coming here she conducted a kindergarten for the blind at Hartford, Ct. From a short interview with her it is learned that this nursery admits children to its care at ages ranging from one day to five years, and that it is the only one of its kind as a training school for the kindergarten for the blind.

Miss Snow emphasizes its need for more adequate and roomy quarters, and she says that the Board of Directors are proposing to begin shortly a systematic movement to raise funds for a new building. They hope to meet with a generous response from the benevolent public, whose encouragement

position that will aid it materially in extending its usefulness so that it may furnish a home for sightless infants, where their physical ills may be alleviated and their minds may be developed sufficiently to enable them to enter other educational institutions when they have arrived at a proper age for more advanced instruction.

The fourth annual report of the Boston Nursery for Blind Babies calls attention again to a subject to which the superintendent alluded at the conclusion of a previous year, the lack of provision for feeble-minded blind babies. She says: "At present there are two such cases in the nursery, a little girl of four and a little boy of three. Both are very deficient mentally, and, strictly speaking, do not come within the province of our work, but there is no other place for them except the almshouse, where they are both sure to die, and it is hard to send them there, though they will have to go in a year or two unless some other place is provided for them and the many others who suffer from mental blindness also."

The general health of the children, according to both Miss Snow and the attending physician, Dr. R. J. McCormack, has been excellent and up to its previous high standard. The latter makes an excellent suggestion to the State Committee on Charitable Institutions, when he hopes they will

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include the Boston Nursery for Blind Babies in their visitations, so that they may gain knowledge that may lead them to pay special attention to one of the most worthy institutions of Massachusetts.

It has already sent one little graduate to the Kindergarten for the Blind at Jamaica Plain. Preparations for his admission there were begun after his fourth birthday—he had been at the nursery since he was fourteen months old—and when he left to go to his new home he was a striking illustration of what proper care and training can do for a blind child during its most tender years. He was far more advanced than many children who enter the kindergarten at the age of nine or ten and have received no intelligent instruction at the hands of their families. Blind children yield inevitably to their natural inclinations if they are not systematically urged to make progressive efforts.

How much more good it might accomplish if its laborers were not financially restricted is shown in the number of blind children throughout New England who have never received medical and surgical treatment of any kind.

This is brought directly to the attention of Miss Snow now and then, and she recently came by chance across a little girl of six years who had been blind from infancy. "The parents," she says, "were poor, and the mother was obliged to work out by the day to assist her husband in supporting themselves and the seven children. The easiest way for caring for the blind child was to keep it in the cradle, and feed it with a nursing bottle; so there the little one has laid year after year until now, though no longer a baby she is as helpless as a new-born infant. She cannot talk or sit up, and her bones have never hardened. It is not strange that under such conditions mental deterioration set in, and today she is hopelessly feeble-minded. If she could have had the advantage of nursery care and training in early infancy it is probable that she might have been saved, or at least her condition greatly ameliorated."

If funds warranted a thorough canvass of Massachusetts would be made and all cases of a similar character would receive the attention of the nursery, though, of course, it cannot care permanently for feeble-minded children, but it can at least discover if there is a possibility of improvement in an unfortunate mental state. It can point proudly to a little boy and a little girl who were thought to be incurably weak minded that it has brought from darkness into light in the course of a few years, and though they are backward children they are now far from being imbeciles. As was to be expected, the girl progressed more rapidly than the boy, and her development is considered remarkable by those who have given close study to the education of the mentally deficient.

Dr. Robert G. Loring, the ophthalmic surgeon of the institution, says that fortunately all the babies in the nursery are not entirely blind. Among these some can be given a fair amount of sight, and he points to two congenital cataracts cases that were operated with satisfactory results. These received before the operation, a care that they probably would not have met with if they had not been at the nursery, whose mission it is to watch over the children who are temporarily blind, as well as those who are hopelessly sightless.

The Visiting Committee of the Boston Home for Blind Babies includes: Miss May Barker, Mrs. Sarah J. Davidson, Mrs. Eugene N. Foss, Mrs. Frederick P. Hazen, Mrs. Walter B. Lancaster, Mrs. Edward J. Milton, Mrs. E. M. NeSmith, Mrs. Edward E. Parker, Mrs. Edward B. Stearns, Mrs. A. G. Van Nostrand, Mrs. Edwin U. Curtis, Mrs. Frederick P. Foss, Miss Mary J. Gill, Mrs. L. Gushing Kimball, Mrs. Hiram N. Lathrop, Miss Fannie D. Morse, Mrs. Charles H. Paine, Miss Annie L. Richards, Miss Elizabeth B. Thacher, Mrs. William W. Davis.

It will be seen from this list that some of our most prominent and devoted charitable workers are enrolled in the duty of promoting the growth and prosperity of the institution.

The officers are: President, Horace G. Allen, 25 Court Street, Boston; vice-president, Rev. Edward A. Horton, William W. Davis; secretary, Bertha M. Snow, 60 Fort Avenue, Roxbury; treasurer, Isabel Greeley, 173 Winthrop Road, Brookline. The board of directors are: Horace G. Allen, William W. Davis, Rev. Edward A. Horton, Raymond J. McCormack, M. D., Robert G. Loring, M. D., Isabel Greeley, consulting physician, William N. Ballard, M. D. Here are a number of well-known public-spirited gentlemen whose names will inspire confidence in the objects and aims of the nursery.

In conclusion, attention may well be directed to the generosity of Mrs. Annie S. Wood, who when told that the nursery was \$300 behind promptly drew her check for that amount and to the liberality of Mr. Leonard T. Powers, the well-known dramatic reader, who gave the entire receipts of a presentation of Goldsmith's comedy, "She Stoops to Conquer," to the Boston Nursery for Blind Babies.

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Poultry.

Visit to a Poultry Ranch.

People who travel often on the Lowell division of the Boston & Maine Railroad may have noticed on the west side of the track, between Winchester and Montvale Junction a number of long, low buildings on the hillside, and if it was in the summer may have seen poultry enough about them to indicate that they were devoted to the poultry business. I took time to visit the place a few days ago and found the owner, M. S. Prescott of Woburn, at home and apparently ready to give an account of his methods and willing to answer such questions as I was inclined to ask.

2500 ROCKS AND REDS.

He usually keeps in winter about 2500 laying fowl, though his present stock is something less than that. They are mostly Barred Plymouth Rocks and Rhode Island Reds, in almost equal numbers, though he has a few of other breeds and some crosses which he is trying, but he says he has not yet found any that are as good layers or make as good poultry as the Plymouth Rocks. He thinks, as a rule, a flock of the Reds begins to lay younger than the flock of Rocks, though he has had Plymouth Rocks begin to lay at 4½ months old, and very many are laying at five months old, which is as young as the Reds begin, but at six months the old Reds are producing more eggs than the same number of Rocks.

To offset this the Rocks usually moult earlier in the fall and begin laying sooner after moulting. Both breeds lay the brown-shelled eggs that are in demand in our markets, and the eggs are about alike in size and weight. He sees no difference in the amount of food required though the Rocks are the heavier fowl. His old hens usually dress from five to seven pounds each. He has had Rocks dress ten pounds, but he does not like such large hens and would not select them to breed from. If it would not make the shells of the eggs too white to suit his customers, would not object to a cross of Leghorn blood about once in five years, returning to the pure-bred Rocks for cockerels the other four years. This would make the old fowl smaller, but more compact and plump when dressed. This might also result in giving more eggs, and eggs are more of a specialty with him than the sale of poultry, but his customers like the brown eggs.

A GOOD BUSINESS AVERAGE.

He could not say how many eggs per year his flocks produced but thought about 150,000 each was a fair estimate. As some are better layers than others he may have some that lay 200 eggs in a year. It would not pay him to use the trap nests to select the best layers to breed from. It would require too much labor which is an important item in the expense account. Now he gets on with the help of one man, but they have to work seven days in a week, and do not make eight-hour days either. As he markets most of his eggs in Winchester, the adjoining town, and his chickens and fowl partly there and partly in the Back Bay district in Boston, only occasionally having to send either to Faneuil Hall market, this takes considerable of his time.

THE NATURAL METHOD.

One peculiarity of his business is that he has never used an incubator. Although he hatches out about ten thousand chickens in a year they are all hatched and reared under hens, and he thinks that a hen will lay quite as many eggs in a year if allowed to hatch out and raise a litter of chickens as she would if she were broken up from setting when she becomes broody. The loss from egg production during that time fits her for beginning again in condition to keep at it for a long time. He usually has some hens broody so that he has chickens hatch in the latter part of January, and from that until the last of May there are some setting, the larger part of the whole being hatched between the middle of March and the middle of April. Even the May pullets are usually laying well in December. He also has some hatched in the fall, which sell well when large enough for broilers, or dressed 2 to 2½ pounds each. A few of these late-hatched pullets are sometimes kept, and prove good layers in the spring and summer when old ones have stopped.

THE PULLETS

are kept separate from the cockerels and used only as laying stock until more than a year old, when the best are selected as the next year's breeding stock, and the others are sent to market when the prices are good for old fowl. He likes to breed from two-year-old hens and yearling cockerels. The winter-hatched chickens are in demand as broilers and 2½ pounds weight and the price used to keep up until June 17, but now it goes down in April or early in May, after which it pays better to let them grow to roasting size of four to five pounds each, at which weight he sells most of the cockerels not kept for breeding purposes. Some chickens are sold in the spring at \$10 per hundred when from three days to a week old.

THE LAYING STOCK AND BREEDERS have houses and yards that occupy between two and three acres, but when the chickens are hatched they go into coops which are scattered nearly all over the twelve acres of land he has. Asked about the room required in the winter houses he said he had wintered 350 in practically one flock, in a space so limited as to allow but about 2½ square feet to each hen, and they laid well all winter, and came out well in the spring. They must be in good condition when they come to the house in the fall to do this, and he would prefer to allow them more room. Yet he had known them to do poorly when allowed five square feet to each bird. More depends upon their condition in the fall than on anything else, as if they come to the house in poor condition neither space or care will bring them up before spring.

MOST OF HIS HOUSES

are two story on the south side, the basement serving as a scratching room where the grain is scattered every day in the straw and chaff on the ground. By an easy incline they go into the room above, which is the roosting and laying room. The feed for the laying fowl is whole corn, wheat and barley. When oats are cheap enough he likes to use them, but the price has been too high lately. Shells, beef scraps, clover and other coarse food are usually within reach of them. Sometimes he buys plunks or other cheap meat for them, but he has no use for the green out bone or the bone of grinding machines, for the same reason that he does not use the trap nests. They require too much labor. He also thinks as I do that the best scraps are better and cheaper as a general feed.

ANOTHER SUBURBAN RANCH.

About a quarter of a mile from Mr. Prescott's, there is another henhouse run by George E. Toland of Woburn. He has not as much land, and keeps about 900 pure-bred Plymouth Rocks. He uses incubators, and hatches out only enough chickens to have

about 1200 pullets to select from. Markets cockerels and old fowl about as Mr. Prescott does, but looks for his profit mostly from his eggs. He can hatch from eighty to ninety per cent. of the fertile eggs in the incubator. He uses the Prairie State, but says there are others equally as good and more depends upon the man who takes care of the machine than upon who made it. He uses the bone mill, and grinds fresh bone from the market for his hens. Thinks that 150 eggs a year is a good average from a flock, and it needs care to get that number. His old fowl dress from seven to 7½ pounds each usually, sometimes some of them weighing more.

Both these parties are supposed to be doing a profitable business, though I had not impudence enough to ask them what their income might be. As eggs average here about twenty-five cents a dozen through the year, the proceeds of twelve dozen a year must amount to at least twice as much as the cost of food for the hens, while the sale of old fowl and chickens should amount to a considerable sum each year at either place. Probably they get a little above the market quotations for their eggs, as they have enough to ship them fresh every day, and do so. Their poultry is also in good demand at the highest market rates.

SYSTEM AND ATTENTION WISE.

The systems and methods of management differ, but I think not so much depends upon the breed or the system as upon having some system and following it up with care and attention to all the many details. They might, perhaps, do better if they were located where they could have more room and adopt the colony house system, instead of keeping so many birds under one roof, but this would mean more labor in taking care of them, especially in winter, and the board and wages of even one more man would add to the expense account.

ONE ITEM OF INCOME

from the poultry I had nearly forgotten. The hen manure sells to the tanneries now at \$1 a barrel. In times past they will not pay \$1.25 and \$1.50 a barrel, but will not now. At present prices I think it would prove a cheap fertilizer for the market gardeners or for one who has a grass farm, if it were properly used, as it is taken from under the roosts unmixed with other material, but that is another subject on which I will not enlarge now. It is enough to say that few farmers or gardeners seem willing to buy it at these prices.

M. F. AMES.

The Early Laying Flock.

Our present method is to feed a mixture of grain at night, covered up in the straw and fine chaff which always covers our floors six to eight inches deep. More is fed than they will eat up clean, so that they can go to work early in the morning with out getting out early.

In the morning they are given warm water or milk, if winter, and two quarts of grain per fifty hens, covered in the litter. Not getting all they want they keep at work all the time, until noon, when the cooked or warm feed is ready and is given them.

Ease and convenience for us and easeless industry on the part of the hens is thus obtained. Health, vigor and eggs are synonymous terms, and are only procured by paying for them in work, that is, exercise. Our ration is corn, oats, wheat and buckwheat in equal parts for whole grain, and three-sixths wheat bran, one-sixth corn, one-sixth oats, one-sixth meal, or oil meal or milk for mash at noon. Cut clover hay, green vegetables, raw meat, oyster shells and dry road dust should be in constant use. Water should never be neglected, not only because the fowls need it, but because the egg is seventy-five per cent. water.

The highest profit comes from so growing the stock that one can have pullets laying in October and during winter, disposing of the cockerels and one-pound weight, and the hens as fast as they stop laying in mid-winter, wintering nothing over one year old.

By keeping no males with the flocks so the eggs will be sterile, gathering them often, and sorting them for size and color to meet the demands of your market, you can easily raise the price from one to ten cents above the market quotations.—C. E. Chapman, Tompkins County, N. Y.

Borticultural.

Apples Pay Farmers Best.

Of course we must pursue all branches that are adapted to our climate. So that if any one thing fails we can fall back on the others. I believe in mixed farming, but the question is what branch is the most profitable. Wheat does not pay in this country. New Hampshire does not raise wheat enough for breakfast. The majority of the farmers of this county do not make corn pay, nor potatoes. Perhaps if we are looking for the benefit of the next generation, some might say that white pine trees would be as profitable as anything, but that can hardly be considered agriculture. We must have something every year or we should all starve while the pine tree is growing.

According to my way of thinking nothing pays better for Merrimack County farmers than fruit, especially apples, and the best kind is the Baldwin. Apples will continue to be in demand. Europe wants our fruit, and there is no place better adapted to raising apples than Merrimack County. The trees come up spontaneously in our fields and pastures, from which we can transplant and graft them. I would give more for one such tree than I would for a dozen sent from a nursery of another State.

I would recommend a large orchard. An apple buyer will look for the large lot first. A man that has from three hundred to fifteen hundred barrels stands a better chance to sell his apples than one that has less than a hundred barrels.

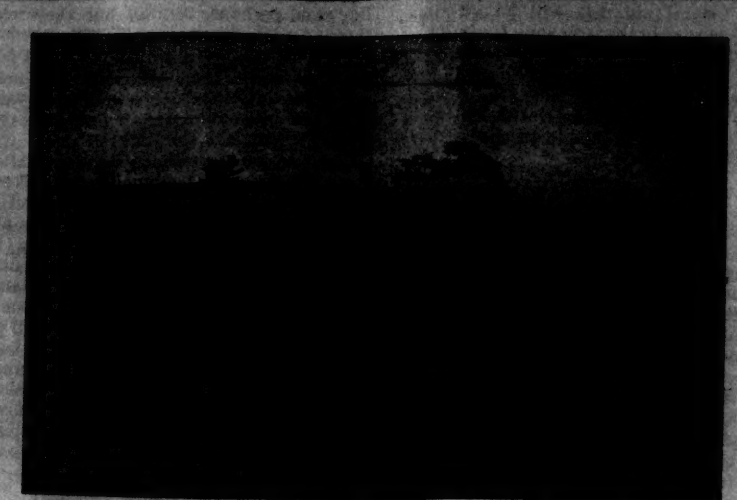
Apple buyers apparently think that if they can get hold of the large lots that they can buy the small lots if they want them at all for what they have a mind to pay.

GEORGE W. FISHER.

Merrimack County, N. H.

Hints on Picking Winter Apples. Apples should be carefully picked by hand, without breaking the skin or bruising the fruit in any way. Summer varieties for immediate home use or special local trade should be allowed to ripen on the tree; but if intended for distant markets or storage they should be picked when fully mature, but before they have commenced to mellow.

Winter varieties should hang on the tree until they have reached full size and have taken on good color. Apples picked while still immature as a rule keep longer than if allowed to fully ripen on the tree, but they do not develop the full color nor the best quality. No sharp distinction can be made between green and mature, or be-



PRESCOTT'S MAIN POULTRY HOUSE.
In the top story of this building four hundred sitting hens are confined at one time and ten thousand chickens hatched in one season. See "Visit to a Poultry Ranch."

between fully mature and overripe fruit; one blends imperceptibly into the other. Experience teaches at what stage to harvest the crop, in order to secure the highest quality and best keeping properties in the fruit. Sometimes, with summer varieties, it is necessary to go over a tree twice, picking the most mature specimens first and leaving the remainder for a week or two in order that it may more perfectly develop.

Round bottom baskets or pails should be used for picking, and it is better to have them lined with cloth to prevent bruising the fruit. Fruit should not be piled on the ground, but should be placed at once on the sorting table or be placed in boxes or barrels for removal to the packing house. The apple should be picked with the stem on, but without breaking off the fruit spur, as is likely to occur if the fruit is picked too green. Spring wagons should be used to convey the fruit to and from the packing house.

When the trees have been properly pruned, the fruit may all be harvested from ladders. A short step ladder is convenient for the under side and low branches of the tree. For the upper branches light cedar ladders of suitable length will be found very convenient. Extension ladders have been praised very highly in the past, but as they are both awkward and cumbersome, practical growers are abandoning them.

The practice of climbing through the tree to gather the fruit and letting the baskets hang off the ground by means of a rope is out of date and is not practiced in commercial orchards. Inexperienced pickers often lose a great deal of time by not picking clean as they go, making it necessary to carry the ladder back and forth. Each time the ladder is moved all apples in reach should be picked.—H. L. Hunt.

Requisites for Lawns.

In town or country, a good lawn is always attractive, especially if its surface is perfectly even and the growth with which it is covered is free from weeds. It may be graded to curved and flowing outlines, but it is still imperative to have the surface even, or at least so proportioned as to harmonize as a whole.

There are two ways of obtaining a lawn—by seeding down the ground, and by turf laying, or, as it is commonly called, sodding. The former requires about five bushels of seed to the acre, and if it is practicable, a ready prepared lawn grass should be used, advising the seedman of whom it is purchased of the character of the soil for which it is wanted and whether the lawn is much shaded or rather open. The seed should be sown broadcast over the surface, and in liberal quantity, for even the best seed procurable will sometimes fail to germinate well, due to unfavorable weather conditions or the like. The surface should then be scratched over gently with an iron rake, being desirable to cover the seed but little, and if the weather is not too dry and hot, rolled.

Prior to this, however, the edges of all drives and walks should be bordered with a strip of sod about a foot wide and set down to about the level of the surface of the soil to be seeded. Otherwise it may be very difficult to obtain good edges. September, or well as May, is the best time of the year in which to do the work, and not until the grass has come up and attained a growth of sufficient strength to prevent disintegration should the surface be walked on or a lawn mower pushed over it.

Turf or sod laying may be done at any time of the year when the conditions of the soil, soil and weather are favorable for the work. The point is to have moisture enough so that the sod will hold at once, and if nature does not furnish this it should be supplied by artificial means. The surface, of course, should be evenly prepared for the reception of the sod, and that as close a connection as possible with the soil when in place, carefully pounded down.

Commercial fertilizers, as a rule, are best for lawns, and special mixtures are to be had that are ideal. Hard-wood ashes and stable manure (the latter to be applied in summer, and mixed up and removed in spring) will likewise result in a luxuriant growth. All that is needed, after that, is watering or sprinkling, either late in the afternoon or early morning, and frequent and close cutting with the mower.

FRED O. SIBLEY.

Otsego County, N. Y.

By-Products of Beef.

When the slaughtering business first became established on a large scale there grew up in the vicinity of the packing plants independent establishments, the function of which was to handle the by-products collected from the packing houses as described in Commissioner Garfield's report on the beef industry. Glass works, fertilizer works, soap factories, oil and tallow works and many others have since been set up from the slaughtering concerns. As the packing business became more concentrated in the hands of a few large companies, these gradually—but finally almost completely—took over the allied industries, effecting various important economies in such unification. At present the leading packers themselves carry the elaboration of almost every possible by-product to an advanced stage. For example, Armour & Co. now manufacture soap, thus utilizing glass which they make.

The most valuable by-product derived from cattle is the hides, which are worth on the average about 60¢ per head. A great number of classes and grades of hides are distinguished, which differ considerably in value. The hides are skinned and kept by the packers from two to six months, according to the state of the market. During this period the hides shrink in weight, the

shrinkage averaging, roughly, one-sixth of the "green" weight.

Next in importance are the fats obtained from the abdominal region and from other parts of the animal which do not constitute beef. At present the better fats, especially those which may readily be detached by cutting or pulling, are so largely destined for use as a constituent of butterine that they are known as butter fats. An average beef animal will produce from sixty to seventy-five pounds of such fat. By heating, also stock is first derived from these fats. This is nearly the same in constitution as ordinary prime tallow, and if the market for oleo products is much depressed oleo stock. Otherwise the stock is subjected to powerful pressure, which separates the oleo oil from the stearin, both of which are standard marketable products. Some of the packers, however, use part of their oleo oil and stearin in manufacturing butterine, lard compounds and cooking oils.

A moderate quantity of tallow and grease of several grades is secured by cooking the heads, feet and other offal, but the quantity and value of fats of this character are much less than those of better fats.

The third by-product of a beef animal, in order of importance, is the tongue, which is either sold fresh or more often is cured or canned. The leading packers ordinarily designate all parts of cattle, except the dressed beef hides, butter fat and tongues, by the term "offal." Among the various articles constituting "offal," the liver, heart, sweetbreads and tails may be marketed without other treatment than trimming.

The other forms of offal require a much more extensive preparation in order to become satisfactorily marketable. From the heads are cut the cheek meats and other small bits of meat, and sometimes the lips, these meats being usually sent to the sausage department. One or two of the packers use part of the horns and leg bones of the cattle slaughtered in the manufacture of various novelties. Otherwise these materials are sold to outside concerns for their own use. The remainder of the feet, however, with the trimmed heads and various other minor parts and trimmings, are subjected to processes of treatment by means of which tallow, glue, neatfoot oil and other minor products are extracted. The residue after such treatment is used for fertilizer. The blood of cattle and various soft parts not containing other valuable material are also converted into fertilizers. The leading packers manufacture a great variety of commercial fertilizers, including those in which phosphate and other mineral substances are combined with the animal products.

The only remaining by-products of any importance are those derived from the intestines, which are carefully cleaned and converted into casings for sausage and other similar products. The weasand, or gut, and the bladder are also cleaned and made into containers for various commodities, some weasands, for instance, being used for packing snuff.

Australian Meat.

The work of meat slaughtering and preserving is conducted on an extensive scale. In New South Wales the capacity of the boiling-down works is stated as 625,000 head of cattle, or 15,968,000 sheep of chilling works, 468,500 head of cattle, or 5,825,000 sheep of freezing works, 78,000 head of cattle, or 5,150,000 sheep, and of preserving works, 123,000 head of cattle, or 5,545,000 sheep, representing a total of 1,401,000 head of cattle, or 20,982,000 sheep. The number of carcasses treated in refrigerating works during 1903 was 3005 cattle and 200,151 sheep, and in meat-preserving works 7794 cattle and 108,348 sheep.

In Queensland there were sixteen boiling down and other works, in which, during 1903, 529 cattle and 110 sheep were boiled down, 106,248 cattle and 1,017,007 sheep killed for freezing, and 16,400 cattle and 13,800 sheep killed for preserving; the total output being 65,453,304 pounds frozen beef, 4,500,901 pounds frozen mutton, 9,774,113 pounds preserved beef, and 494,416 pounds preserved mutton. In Victoria there were fourteen freezing, etc., establishments, the united output in 1903 including 294,000 from sheep, 1387 cwt. frozen mutton, 1454 frozen cattle and 7287 cwt. preserved mutton.

The meats are exported in four different forms—fresh, frozen, chilled and smoked. The trade in fresh meat is almost wholly interstate. Respecting the relative merits of chilled and frozen meats, there exists considerable difference of opinion, but, as a matter of fact, frozen meat constitutes the bulk of the overseas exports, chiefly to Europe and South Africa, being greatly appreciated in the latter country, where it commands a ready sale in preference to that from elsewhere. The exports of Australian preserved meats in 1903 totaled 11,000,377 pounds, value \$106,952. Considerable quantities of salted meats are also exported, chiefly to South Africa and the Philippines.

There is likewise a large and increasing trade in rabbits, hares, etc., the quantities exported in 1903 being: New South Wales, 747,474 pairs; South Australia, 132,200 pairs; Victoria, 2,801,211 pairs. In 1904 the Victorian exports were about the same as in 1903. It is officially stated that the rabbits are steadily increasing in numbers in Queensland, New South Wales and Victoria, and in the two former states they constitute a prolific source of difficulty to cattle raisers. Their fecundity is truly remarkable. A single pair of rabbits, if left undisturbed, will, all things being favorable, have a hundredth their numbers to one and a half millions in four years.—Melbourne Herald.

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Sürwürden is railway, post and telegraph station on the Bremen-Hude-Nordenham Line, 15 hours from Paris, 24 from London, 9 from Bremen (landing place of North German Lloyd steamers), 3 from Hamburg. English spoken and corresponded.

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KREMLIN, 2:07³/₄
Sire of forty-one in list, one producing son, six producing daughters.
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OUR third importation of 1904 arrived a few days before New Year's of over 100 head of draft stallions, two years old or over. In this lot were 40 Belgians, 40 French and the balance English horses. We make a specialty of the big, thick, strawberry roans. We have in this lot 30 heads of the best of quality and highest size. The three importations of 1904 number over 300 stallions. This last importation is in line shape, not one with a cold or a cough and every one for sale. We do not keep a few covered imported horses year after year for showing and borrow the balance of our show herd. We bring out every year a new champion, and 1904 two new champions, one at St. Louis, the other at the International. We have now 150 stallions of the wide-spread range sort. In fact we guarantee to show intending purchasers more than 1000 of the wide-spread range sort. We guarantee to pay all expenses and leave the purchasers to be the judges. We guarantee to pay per cent. broodmares, insure against death by fire and theft and give the easiest and most satisfactory terms. Come to Wenona and see the oldest importer today in the business and the importer that has brought more thick breeding stallions of 2000 lbs. than any three firms today in the business, and prices to suit.
60-RESPONSIBLE AND RELIABLE SALESMEN WANTED. Either on Salary, Commission or at Price—50. Or we will sell to small dealers and take pay when sold by them, provided good security is given.
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Our CATALOGUE of 164 pages fully describes hundreds of other varieties of Flowers, Plants and Vegetables. Also Three Good Novels that you can't buy elsewhere. We will catalogue free. Satisfaction Guaranteed.

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The latest fashionable fad is the keeping a pet cat. They are not often allowed to roam with the same freedom as nature intended them to, therefore they cannot exercise their instincts in procuring grubs and insects necessary to their health. A tonic is, therefore, necessary, and the Walnut Cat Food is the best for them. Keep them healthy and active. They thrive on it. Increase their appetite, furnish strength and vitality, and allow the hair to be of soft texture. For old cats. It gives them life and appetite. Comes in powdered form in bottles. Try it and make your cat a beautiful pet. Send for a bottle, or \$2.50 per dozen. **BOURBON & BUTLER, Tremont Street, Boston, Mass.**
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They are interesting, require much training, yet with all their brilliancy of action are very hapless. Constant attention is necessary. A saddle must be well groomed. Nothing dear for his skin or his coat than Gleanings, a stable blooded. Bred with a sprig. Makes a delightful accompanying companion. Supplied by **U.S. EASTERN DRIVE CO., BOSTON.**

The Horse.

The Horse for Market.

For immediate purposes of work a horse should be at least five years old, well matured and well broken. Immature horses under five years of age, do not stand well upon the city pavements, hence are likely to sell at a depreciated price. There is, however, a good and growing demand for well bred, well formed, strongly developed, sound, active, heavy draft geldings under five years of age to be fattened for markets by men who make a specialty of that business. Such horses are classed as "Feeders" in the market.

It has been said that "a good horse is a good color," but there is some discrimination against "washy" colors, pink noses, "blee-bitten" gray, white and "mealy" bay horses. A solid gray color in horses of "French blood" will outsell black by \$30, or over that figure in some instances. Carriage teams will best when matched as regards color as well as other requisite points.

Horses offered for sale should be well groomed, but foretops, manes and tails should be left intact. A clipped or "roached" horse is likely to be regarded as "second-hand" in any large horse market. Vice injures the value of the horse so afflicted and any serious defect or unsoundness speedily will be detected and have the same effect. It especially is desirable that the feet of all horses should be properly cared for, so that at marketable age the horse may appear to the best possible advantage. Horses notably unsound as regards wind, limbs or feet should not be forwarded to the market. They will surely prove an expense to the shipper. The average life of a sound horse used steadily upon the streets of a city is five years; the unsound or weak-footed horse wears out in considerably less time.

City horse dealers and commission men are excellent judges of horseflesh and are most of the professional buyers to whom they sell country horses. Good points instantly are noticed and estimated at their proper value. Departures from sound or desirable conformation, quality, action, condition or temperament as surely diminish the value of a horse in the market. Breeders, therefore, should carefully study what has been set down elsewhere in this bulletin relative to conformation of light and draft horses and learn to avoid defects that depreciate the market price of horses. Blemishes such as unsightly barb-wire wounds, scars, mutilated ears, lips or nostrils should be avoided so far as possible, and to this end barb wire fences should be done away with on every farm where horses are bred and reared.—A. S. Alexander, Dane County, Wis.

Breeders Notes.

Three stallions have passed miles in public in 1905, viz., Star Pointer, Dan Patch and Audubon Boy. Star Pointer is a member of the noted Hal family of pacers, but Dan Patch and Audubon Boy are both trotting-bred and both are inbred to Geo. G. Wilkes (2.23).

Dan Patch is a wonder. He paced the middle half of the mile in 26½ seconds when he reduced his record to 1.024 at Lexington on the 7th inst. The time of the first quarter was 29½, the second twenty-eight, the third 28½, and the fourth twenty-nine seconds. It is gratifying to know that he was driven a mile the 11th inst., without a runner in front.

The 2.10 list now numbers 102, of which thirty-one are trotters.

Adell that holds the world's champion record for yearling trotters, is now credited with two trotters that have made records below 2.10 in races that they won. They are Rowellan (2.09) and Miss Adell (3) (2.08). It may seem singular to some but it is a fact nevertheless, that the second dam of Rowellan (2.09) was strictly thoroughbred, and the third dam of Miss Adell (3) (2.09) was by the thoroughbred Austerlitz. Rowellan was bred in California and Miss Adell in Kentucky. It looks as though a near thoroughbred cross is beneficial rather than detrimental to the get of Adell, so far as extreme speed is concerned. Study the tables, keep posted on the breeding of the noted race winners and form your own opinion as to the value of the right kind of a near thoroughbred cross.—Horse Breeder.

Trotters that were bred or are at present owned wholly or in part by Massachusetts horsemen, were among the most sensational performers at Lexington, Ky., last week. Among them are Admiral Forbes (2.04½), bred by the late J. Malcolm Forbes; Miss Adell (3) (2.08), owned jointly by Lon McDonald of this city and a gentleman in New York State; Ethel's Pride (2.08½), owned by Boston's dry goods magnate John Shepard, and Glenwood M. (2.07½), owned by Ralph Williams of this city. The pacer Loonah that beat a strong field at Lexington on the 7th inst., and reduced his record to 2.02 the fastest heat in a race this season was formerly owned by Mr. Brodline of this city.

Butter and Cheese Higher.

The butter market has been firm all through the week and quotations now range a fraction higher on leading grades. The demand is quiet as might be expected on the advancing market, consumers not being yet convinced that the rise is permanent, but as the advance comes along with the decreasing receipts and as other lines of dairy and farm produce seem to be going higher, it looks as if the butter rise might be legitimate. Dealers report the import sales only, with 2½ cents the top price for choice Northern creamery and one cent lower for corresponding dairy. Box and print goods command half a cent premium over tub lots and are selling fairly well. The rise in cheese follows the advancing prices in the country markets, especially at the West. Prices jumped up about one cent in both New York and Boston markets with Western markets at a corresponding altitude. Trade is quiet in all grades.

At New York the influence of lighter supplies, present and prospective, was shown in a somewhat higher market for useful grades of fresh table butter. Buyers are not paying the extreme premium, however, that they did some time ago. Leaving qualities suitable for best trade there is an irregular market with an abundant supply of stock. Many receivers have quite a number of lots which have accumulated for some time past, and they are anxious to sell them. Values are largely a question of negotiation. Some interest was shown in choice to fancy storage creamery at from 21 to 23 cents. The finest New York State dairy has moved up a little also, but other grades drag. No change in imitation creamery.

In cheese while there is little in the local conditions to warrant higher prices, still the decidedly higher figures paid at primary markets during the latter portion of last week have had their influence, and prices

were advanced in sympathy three quarters of a cent per pound on all grades of full cream cheese. Buyers in the country apparently continue to have considerable faith in the future of the market, and dealers here have no alternative but to follow along if they desire to secure fancy cheese. A few of the regular markets under engagement are being passed, but outside of that there is little demand except for such small lots as needed for current use. Small white and colored cheese has the preference. Weather conditions in the country continue favorable and the market keeps up remarkably well. On the present basis of prices obtainable it is more than probable that factories will keep running as long as possible. Large cheese continues in moderate proportion in the receipts, but has little call from home trade dealers, while present prices are beyond exporters' limits. Holders, however, are very firm in their views, especially on colored. Skins continue in moderate supply, and with fair demand the market is firm with prices advanced one-half cent on all grades.

Latest cable advices to George A. Cochran from the principal markets of Great Britain report butter markets as quiet, but steady. Arrivals are increasing, and lower prices are looked for by some. Finest grades: Danish, 25½ to 26½ cents; Irish, 25½ to 26½ cents; Canadian, 23 to 24 cents; Russian, 21½ to 22 cents; American creamery continues quiet, and sales are light, taking a range of 20 to 22 cents; ladies are unchanged, and the demand slow at 18½ to 19 cents. Cheese markets barely steady, buyers are very conservative in trading, and show little interest beyond immediate wants. Finest American and Canadian, 12 to 12½ cents.

The Milk Price and Clean Cans.

Ex-Governor Bailett of New Hampshire states himself somewhat amused that the proposition requiring cans to be cleaned before returning to the milk producers should have come voluntarily from the milk contractors. "It was argued," he observes, "that it would be impossible to do so on account of the expense involved, and that the cans if cleaned by the contractors would not reach the producers in condition suitable for milk. Such legislation has always been urged by the producers on the basis of sanitation and public health, because it was impossible to clean the cans on the farm, as they should be cleaned, without great expense for labor and outfit." The price, which is the same as last winter, with the discount of one-half cent per can for cleaning, is the subject of some discussion among the producers, and on general principles it is considered tending in the long run to the advantage of the milk trade for all concerned.

Good Prices for Good Apples.

In western New York the apple situation seems to be stronger than ever. Prices as high as \$4.50 and \$5.50 have come in from some sections for choicest, long-keeping apples suitable for storage, but even such fruit as firsts and seconds packed together are selling at \$3 and upward of the standard varieties. As a general rule, however, prices are as yet on a lower level than above stated, quite a number of sales being reported at below \$3, down to \$2.25 in some localities. The heaviest yield seems to be in Niagara, Orleans and Wayne counties. Exporters are running to some extent, paying from 25 to 35 cents per bushel for the grade of fruit which they use, which is somewhat better than older fruit.

The apple situation seems even stronger in the West than in the East. There is already quite a movement of Eastern apples to the West, and when the two lines of fruit are compared it is seen that Eastern apples are much better in quality and appearance. A few years ago it was talked that the Prairie States would soon run the Eastern apple States out of business, but they have not done so yet, and such a thing at the end of the industry seems to have the best of it, with more and better apples to sell and ability to dispose of them to best advantage right in the field of their Western rivals. Prices at Chicago are quoted exceedingly high, and some dealers who had engaged cold storage gave up their contracts, alarmed over the high prices of the fruit, which they feared would take away all chance of paying expenses and coming out with a profit, but there are others with more courage who are taking their place, and it looks as if all the available fancy fruit would soon be in the hands of speculators and storage people. Every week the demand for apples looks stronger, and it becomes more evident that choicest fruit, after the turn of the season, may be in short supply, perhaps very scarce.

Boston dealers say that apples sell better at present prices than last year at \$1 to \$1.25 per barrel. The reason, of course, is that receipts are very much lighter. Some assert that apples will sell \$1 higher before Christmas. Cool, snappy weather would improve the demand.

Good apples of any kind are selling at about \$3.50 in Chicago. The high figures have much reduced consumption and made the trade uncertain. Fancy apples are quoted as bringing extremely high prices, some as high as \$7.50 to \$8. Such conditions indicate one of two things, either that prices are too high for the season or else that there is a scarcity and prices will be extremely high later in the season. It is generally agreed that good apples are in very short supply throughout the West.

Apple growers in Ontario are complain-

ing of a lack of care for shipping their three hundred barrels of apples now about ready for market. The good demand for cars in shipping grain results to the disadvantage of other produce shipments.

The valley region of Virginia seems to be the only section which claims a bumper of apples this year. They claim to have more apples for the area in orchards than any other section, and the price they are receiving should show them good profit.

The Oregon apple growers have been in clover this year with their fruit selling at \$1.75 to \$3 per box, about the range obtained by Eastern apple growers for barrels. It is said that the average in Oregon will be rapidly increased as a result of profits in recent years.

Apples Lower in Europe.

The foreign apple market has had something of a slump, owing to the large amount of poor apples sent in. It looks as if some shippers had been putting almost anything into the barrels, with the view that since apples are scarce in Europe everything would sell.

The result has been a wide range of quotations with the lower range of a figure giving little profit for poor apples. Good apples, however, bring good prices, and are likely to do so all winter.

G. R. Meeker & Co. On sales made during the past week in the various European markets, the prices have ruled low, owing principally to the large amount of fruit which has been forwarded, a greater portion of which has been inferior quality. The shipments have been, in our opinion, out of proportion with the crop, and we now look for a falling off from the figures of last year. The shipments for the week ending Oct. 7 from New York to all ports was 47,000 barrels, whereas, for the week ending Oct. 14 was only 37,000 barrels, which is a falling off of ten thousand barrels, and we feel convinced that it will continue to fall off in even greater proportion from now on, as the bulk of the Hudson river fruit without doubt has now been marketed. We have received the following quotations by cable:

From London, Baldwin's, \$3.95 to \$3.90; Greenings, \$3.70 to \$4.40; Spits, \$3.40 to \$4.15; Ben Davis, \$2.95 to \$3.65; Seeks, \$3.50 to \$4.35; Albemarle Pippins, \$3.25; Newbards, \$3.40 to \$4.15; Kings, \$3.25 to \$4.40; From Glasgow, \$3.40 to \$4.40; Newbards, \$3.40 to \$4.40; Greenings, \$3.70 to \$3.65; Spys, \$3.65 to \$4.40; various, \$3.15 to \$4.40. From Liverpool, Baldwin's, \$2.45; Greenings, \$2.95; York Imperial, \$2.70 to \$4.15; Newbards, \$4.85 to \$5.85; Winesaps, \$2.45 to \$3.15.

The apple shipments from all ports for the week ended Oct. 21, with comparisons, figures in barrels, follow: From Boston, 21,000 barrels to Liverpool, 944 barrels to London, total 22,000 barrels; from New York, 3988 barrels to Liverpool, 4325 barrels to London, total 8313 barrels; from Portland, Me., 6204 barrels to Liverpool, total 6204 barrels; from Montreal, P. Q., 23,233 barrels to Liverpool, 4756 barrels to London, 16,000 barrels to St. John, N. B., forty-three barrels to London, total forty-three barrels. Total for week, 55,541 barrels to Liverpool, 10,065 barrels to London, 23,984 barrels to Glasgow, total 104,000 barrels; same week 1904, 100,204 barrels; same week, 1903, 300,210 barrels. Total for the season, 702,937 barrels.

Vegetables in Good Supply for the Season.

The vegetable market is perhaps lower on the average this week than last. Supplies have been coming in a little more abundantly with the warmer weather since the first of the week, and demand not having increased prices went down. A hard freezing would kill everything not absolutely hardy would out of native supplies and increase prices of such as were held in reserve or grown in greenhouses or shipped from the South. The fall has been a remarkable one for marketing vegetables and wholly in favor of growers near the market. A few outdoor tomatoes remain, selling at extremely high prices. Other tender outdoor vegetables are pretty well cleaned up. Beets continue in an advancing tendency. Onions and cabbages are fully as high and would apparently go higher with the rest of the market. Cabbages, peppers, squashes, string beans, turnips are either unchanged or lower.

The tone of the onion market is improving somewhat with higher prices quoted in some markets for choice Connecticut stock. Receipts of all lines are not heavy. Prices at various country shipping points are quoted at 20 to 70 cents a bushel with corresponding figures quoted at the receiving centers. Some onions are going into storage and dealers talk even higher prices.

Will It Pay to Hold Corn.

According to information just collected by the Missouri Agricultural College, the farmer who puts his corn in a crib to hold it for better prices can count on a loss by next June of at least fifteen percent. That is to say, leaving out of account the cost of handling and loss by waste, thirty cents a bushel for the crop now is better than thirty-five cents next spring.

This conclusion is based on the reports of careful experiments covering seven years and extending over a large part of the Mississippi valley. At the low ration, for example, seven thousand pounds of corn were husked and stored Oct. 19, in a crib built upon scales in order that the weight might be taken without disturbing the natural condition of storage. There was a shrinkage of nine per cent for the first quarter year, five per cent for the second, three per cent for the third and 3.7 per cent for the last quarter. The experiment was conducted under the conditions that normally exist in this section of the United States, and the results may, therefore, be taken as typical of those that will obtain on the average Missouri farm.

The Missouri College of Agriculture, however, does not advise farmers to sell their corn, but to feed it to some class of animals, thus returning a much of it as possible to the soil. Careful estimates show that where corn is fed eighty-five per cent of it can be sent back to the field to preserve its fertility. Selling the crop means taking this eighty-five per cent from the farm and thus, needlessly, reducing its fertility.

Considerable of a campaign has developed over the furnishing to League Island Navy Yard, Philadelphia, of butter which analysis has proven to be simply oleomargarine colored with coal tar dye. Samples were taken from the Government receiving ship Lancaster, several battle ships and cruisers and from the hospitals of the Navy Yard by agents of the Pennsylvania Dairy and Food Commission. Dr. Wayne, the State Commissioner, declared them to be specimens of coal tar dye, and after considerable delay

they were finally returned to Dr. Wiley, the chief chemist of the Department of Agriculture, who contained Dr. Wayne's findings. Secretary Wilson has ordered the report to the President, who has it stated, called the attention of the Department of Justice to the matter. Several arrests have already been made.

In speaking, however, of the substitution of oleomargarine for butter in the market, Dr. Wiley said that at present the amount of oleo sold in this country, whether fraudulent or not, was marked as oleo, and is quite small. The Government has remedied the making and sale of the stuff, and is probable by levying 10 cents a pound on all that is artificially colored and a half cent if uncolored.

"Coal-tar dyes," said Dr. Wiley, "are not particularly harmful, though by no means wholesome, and dairymen are permitted under the law to use such coloring matter to impart to their butter a rich yellow color. To render this unnecessary the Department of Agriculture is now trying to educate the popular taste in favor of uncolored butter, and we are making some headway. Over in Europe one never encounters colored butter in any of the hotels or first-class markets. The people there have learned to distrust it. We are coming to this in the United States. Today first-class hotels and fancy groceries will not buy butter that has a fine color. Our opinion and those who live well are also fighting shy of it, and as a result the dairymen are beginning to realize that the bottle of coal-tar dye is no longer a necessary adjunct to a successful dairy."

Fairly Active Fruit Trade.

The Boston apple situation shows about last week's general features, with a good demand for choicest stock and something of an overabundance of windfalls and second-rate fruit. This condition is a usual one at picking time and immediately after, and the market can hardly fail to improve when the bulk of the common stuff is out of the way. The market behavior exceedingly well, indicating a chance of high prices, especially for first rate apples. Cranberries hold very steady with rising tendency in New York not yet reflected in the Boston market. Grapes are in fair supply and of excellent quality. Quinces show no special change. Native ones bring \$4 for good ones and \$3 for seconds by the barrel. Really fancy ones if at hand would sell higher.

At New York demand for apples is fairly active and market well sustained especially on highest grades, which are not in any surplus. Pears selling well with fancy, with scattering sales above quotations. Quinces are in fair supply and meeting good outlet if large and well colored. The few peaches arriving show irregular quality and value. Grapes are in moderate supply and firmer. Cranberries are in good demand and with light receipts tone is firm, with some scattering business above the advance quoted.

Hay Prices Steady and Settled.

The market for hay is now in a fairly settled condition, and the quotations hold about steady, indicating that supply and demand have about reached a balance, and unless something unexpected happens prices will not change greatly for a long time. The tendency is to an improvement rather than the reverse, since arrivals tend to decrease and the difficulty to obtain cars for shipment on many lines will tend to check the movement of hay for some time to come.

Confident Feeling Among Potato Growers.

The potato situation has certainly become distinctly stronger in the past few weeks. The changed conditions are shown not in any one section, but reports agree from the leading potato-raising districts, not only in northern Maine, but in the Lake region and in New York State.

In all these places growers have been showing a confident feeling and not willing to sell potatoes at anything less than the top of the going prices, while many are holding for higher prices. Thus in Michigan earlier in the season many growers were holding for \$1.50, but some are now inclined to insist on a still higher figure. In the Maine section there are some growers who think \$1.50 or more may fairly be expected. Taking an average of the reports, it looks as if prices had advanced five to fifteen cents since last week at the various large shipping stations throughout the country.

It is true that there are potatoes enough even although the crop is a good one less than that of last year, but on the other hand the crop is by no means excessive, the times are good, and prices of other leading crops, including grain, apples, onions, cabbage, etc., show a higher tendency, owing to the general prosperity and good buying power of the public. Accordingly, the growers argue there is no reason why potatoes would not sell on a high level even if there is no actual scarcity in the supply. The reasoning appears sound, and in fact, there is nothing to indicate a lower range of prices, but rather a strong, healthy market throughout the season, with the level of prices checked only by the possibility of liberal imports from Europe if prices should go much higher.

That the movement of Arrostook potatoes is quite active is shown by the great shortage of cars on the Bangor & Arrostook Railroad. The trouble is owing to the general freight activity throughout the country which has used up all the surplus cars. It is stated that the Arrostook shippers could use five hundred more cars to take potatoes from the storerooms to Bangor and other leading markets.

Firm Prices for Fresh Eggs.

There is a good demand for strictly fresh eggs from nearby points, and Western eggs are also holding well at relatively lower prices. Storage stock is firm, and selling somewhat better than last week at 20 to 23 cents. Storage men seem anxious to clear out what stocks they can at profit rather than wait for high prices with the possibility of having some of the stock left over in a hurry to sell at a loss later. It looks as if fresh eggs would be at a premium all winter with the prices limited only by the abundance of reserves and cold-storage stocks to which the public will resort to considerable extent when prices go above what they consider a reasonable limit.

The egg market is the subject of considerable interest among Boston dealers. Some are talking a winter of cold weather, egg scarcity and high prices, while others, taking into account the big stocks in storage, think the storage people will be lucky if they come out without a loss. The situation of fresh eggs is certainly favorable to producers, the supply being short and prices advancing at many instances of demand. The

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season is approaching now when eggs will be in heavy demand for cooking, and unless consumers resort somewhat to the storage stocks prices are likely to soar. So far the demand for storage stock has been much below that of last year.

Good Demand for Wool.

The wool trade is reported in a fairly active condition. Western wool growers look for a banner year in 1906, and even predict higher prices. They seem unwilling to contract their clip in advance, even at the high level now offering. Shipments from Boston to date are considerably in advance of last year at this time with receipts correspondingly increased.

Produce Notes.

The quality of chestnuts arriving at this market is unsatisfactory to dealers. A large proportion of the nuts are wormy or otherwise inferior, and there is a wide range of prices. Some lots of chestnuts arrive short weight, the legal weight in this State being fifty-six pounds.

Michigan and Georgia seem about even on the peach question. Last year Georgia had about five thousand carloads and it is figured this year the Michigan crop will reach about the same figure, the season being now about over. Fortunately, both crops of crops did not come in the same year.

The sweet corn, which even now occasionally comes into the market, is mostly obtained from stalks which were cut just before the severe freezing and laid away under cover and the ears plucked off just before sending to market. Under these conditions the corn will keep in good condition for some time after the stalks are out. A gardener in southern Maine reports his method is to pile the stalks on grassy ground and cover with a blanket. Covering prevents the corn from drying out and keeps the ears plump and fresh and in good condition for the table a month later than usual.

The cranberry situation is very strong, prices having kept on an upward plain with a persistency surprising to most dealers. It was expected prices would go higher, but hardly expected it would advance so promptly. Many of the growers are still holding their crops and talking of big prices to come. The approach of the Thanksgiving markets will give the situation a good test. Everywhere on the Cape one hears of the profitability of the cranberry industry when it is scientifically conducted. A bog must be one of the best paying real estate investments in the country. Thus an acre of bog in Plymouth County yielded a net of \$853.00; a bog of 2½ acres for thirteen consecutive years yielded over six hundred barrels annually, and earned for its owner \$10 a day net profit during the entire period; a bog of eleven acres yielded \$6000 annually in 1901, 1902 and 1903; a bog of ten acres paid for itself in three years; a bog of forty-five acres paid for itself seven times in eighteen years. A bog of sixteen acres yielded 2700 barrels, or 184 barrels an acre, in 1904; another of 130 acres yielded 104 barrels and more the same year; stockholders in another bog received a dividend of 31.25 per cent. In 1904; stockholders in another have never received annual dividends of less than fifteen per cent. during the past eleven years. These are said to be typical instances.

The banana crop is reported a light one, rather less than half a crop in Central America. The foreign fruit business is in the hands of a trust that will be likely to quickly take advantage of the situation and put prices up as high as the public will stand. The banana business has grown enormously during the past ten years, having increased from imports of four million bunches to last year's receipts of twenty-three million bunches, besides the enormous increase in shipments to Europe. A large apple grower of central Vermont is said to have refused an offer of \$3 per barrel for his crop and to have preferred shipping the entire lot to Boston to be put into storage. He believes, and not without show of reason, that really choice storage apples will be scarce the last part of the winter.

The poultry situation remains about the same as last week with prices steady and demand quiet. Northern chickens are in moderate supply. There is still an oversupply of over weight chickens, the market preferring either light-weight broilers or heavy roasters. Live poultry also holds about steady, with 12½ cents the top price for fowls, and the average chickens selling about the same as fowls.

The potato market shows a decidedly improved tone with the 65 cents quoted for bulk lots of choice Maine Green Mountains. Harrel sells at slightly higher rates, allowing also for the barrel.

Potato prices in northern Maine range around \$1.25 per barrel. A large quantity are in potato houses waiting for a more satisfactory market, but many growers are shipping them as fast as they can find the cars to market at present prices. It takes courage to hold for higher prices after last year's disastrous experience. This year it is probable that a gradual marketing, from now to the end of the season, will average best results. If all were to hold or all to ship in a hurry trouble would follow.

In three standard vegetables, potatoes, cabbage and onions, are all in a firm position on the market with the outlook favorable. Potatoes, as well known, are a much smaller crop than last year, and likely to command a fair price right through the season. Onions are also a short crop and the prices have been improving with a prospect of some further gain. Cabbages, at first supposed to be an excessive crop, now turn out to be less than expected, and opinions of quite a number of dealers indicate fancy prices to come. These three vegetables bring a great deal of money to farmers of the country, and a satisfactory market will do much to promote the agricultural product.

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